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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/613,096

07/07/2003

Hajime Watabe

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25944 7590 01/29/2007  
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EXAMINER

EPSHTEYN, ALEXANDER

ART UNIT

PAPER NUMBER

3714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/613,096	WATABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Alex Epshteyn	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-15 and 17-23 is/are rejected:
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 8, 9, 14, 15, and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (US Patent 6,126,449) and further in view of Ota (US Patent 6,001,013).**

Regarding claims 1, 15, 17, 22, and 23, Burns teaches of training and gaming apparatus comprising:

- A storage section that stores one or more predetermined assigned movements (2: 43-55) for each of a plurality of detection regions (9: 55-64).
- A way to detect a movement of a player with a detection range that is divided into a plurality of detection regions, the movement detection section detecting one or more movements of the player in each detection region (9: 16-30).
- A way to compare the detected movement of the player and the predetermined assigned movement stored on the basis of a direction, or speed for each of the detection regions (3: 60-67 – 4:1-9).

Burns, however, lacks a game level setting section for setting a game level of difficulty, wherein at least one of a tempo of the assigned movement, a type of the assigned movement, and the similarity is changed based on the game level of difficulty.

Ota, in the same field of endeavor, teaches of a dancing game with a level setting device for setting a basic movement level on the basis of the performance of the player. It would be obvious for one skilled in the art to have modified the teachings of Burns and incorporate the teachings of Ota so that the apparatus as taught by Burns would have a better training element so that the level of difficulty of performing a correct move included emulating a more advanced golfer would be increased as the participant becomes better at the movements.

Regarding claims 2 and 3 Burns teaches of a game apparatus where a comparison is made between the movement of the player and the predetermined assigned movement (2: 43-56). A timing notice is given to the player by means of showing of the correct time and an instructive command is given to the player based on the timing (3: 60-65). Burns teaches that one element in such a comparison is of the timing between the predetermined movement and the actual movement (3: 60-65).

In regards to claim 4, Burns teaches of a movement specifying section that specifies, among movements of the player for each of the detection regions, a movement of the player for each of the detection regions detected by the movement detection section (9: 55-64).

In regards to claim 8, Burns teaches of a game wherein the movement detection section detects a detected movement of the player that extends over more than one of the detection region, where the detected movement of Burns is an overlap of any one of the two camera views (9: 15-30). The similarity decision section then decides the

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similarity between the detected movement of the player and the predetermined assigned movement in each of the detection regions (9: 55-64).

Regarding claim 9, Burns teaches of a game apparatus, which comprises a region-by-region comparison of the player movement and the predetermined assigned movement (9: 55-64). The decision of the comparison is then displayed to the player according to the similarity in each detection region (3: 60-65).

In regards to claim 14, Burns teaches of a chip, which streams pixel data into a microprocessor and for capturing the player (9: 15-30), which is what an artificial retina chip does.

In regards to claim 19, Burns teaches of a game apparatus wherein a plurality of concurrent movements of the player is detected in one detection region by the movement detection section and the movement specifying section specifies one of the concurrent movements of the player detected in one detection region based on a direction or speed (2: 43-56).

Regarding claim 20, Burns teaches of training and gaming apparatus comprising:

- A storage section that stores one or more predetermined assigned movements (2: 43-55) for each of a plurality of detection regions (9: 55-64).
- A way to detect a movement of a player with a detection range that is divided into a plurality of detection regions, the movement detection section detecting one or more movements of the player in each detection region (9: 16-30).

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- A way to compare the detected movement of the player and the predetermined assigned movement stored on the basis of a direction, or speed for each of the detection regions (3: 60-67 – 4:1-9).
- A way to compare made between the movement of the player and the predetermined assigned movement (2: 43-56). A timing notice is given to the player by means of showing of the correct time and an instructive command is given to the player based on the timing (3: 60-65). Burns teaches that one element in such a comparison is of the timing between the predetermined movement and the actual movement (3: 60-65).

Burns, however, lacks a game level setting section for setting a game level of difficulty, wherein at least one of a tempo of the assigned movement, a type of the assigned movement, and the similarity is changed based on the game level of difficulty.

Ota, in the same field of endeavor, teaches of a dancing game with a level setting device for setting a basic movement level on the basis of the performance of the player. It would be obvious for one skilled in the art to have modified the teachings of Burns and incorporate the teachings of Ota so that the apparatus as taught by Burns would have a better training element so that the level of difficulty of performing a correct move included emulating a more advanced golfer would be increased as the participant becomes better at the movements.

Regarding claim 21, Burns teaches of a detection range that is divided into a plurality of detection regions, wherein the similarity decision decides the similarity

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between the concurrent movements of the player and the predetermined assigned movements for each detection region (9: 15-64).

**Claim 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns and further in view of Baker (US Patent 5,486,001).**

What Burns teaches has been described above and is incorporated herein. Burns teaches of a field for performing the movement detection and similarity comparison based on the position of the user (9: 15-30). Burns, however, fails to explicitly teach of changing the detection region based on the body shape of the player.

In the same field of endeavor, Baker teaches of a game apparatus where the comparison decision changes the decided comparison according to a predetermined condition detected by the movement of the player (see column 2, lines 36 – 45). In the case of the apparatus of Baker, as the movement of the player changes, the comparison mechanism changes the visual image signals when compared to the said predetermined condition. Baker also teaches of a game apparatus where the detection region is changed according to a predetermined condition detected by the movement of the player (see column 3, lines 14 – 26). In the case of the apparatus of Baker, if the arm length of a particular player is shorter than the arm length of the previous player, the detection region of the apparatus will change to accommodate the shorter player and the movements detected by the movement detection of the game. Thus, the predetermined condition relates to the body shape and motions of the player detected by the movement detection section.

It would be obvious for one skilled in the art to incorporate the teachings of Baker into the apparatus of Burns so that the detection of the player would be automatically adjusted for each new player that steps up into the training apparatus. This would provide a more efficient training method in the system of Burns.

***Response to Arguments***

Applicant's arguments with respect to claim 1-4, 8-15, 17, and 19-23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Epshteyn whose telephone number is 571-272-5561. The examiner can normally be reached on M-F 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AE

A handwritten signature in black ink, appearing to read "R. Olszewski", with the date "11/22/07" written to the right of the signature.

ROBERT OLSZEWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700